

7 placing said one of the plurality of geometric shapes associated
8 with each data value of the plurality of data values on the grid; and

9 displaying visual and geometric information placed on the grid to a
10 user in graphical form.

1 2. (Once Amended) A method for visualizing data arrays
2 provided in the form of a plurality of data values, said method comprising the
3 steps of:

4 generating a grid based on a plurality of data values;

5 identifying one of a plurality of numerical attributes associated
6 with each data value of the plurality of data values;

7 associating each numerical attribute with one of a plurality of
8 visual attributes;

9 associating each data value of the plurality of data values with one
10 of a plurality of geometric shapes each having one of the plurality of visual
11 attributes, which is consistent with the data value, according to a predetermined
12 set of rules;

13 placing said one of the plurality of geometric shapes associated
14 with each data value of the plurality of data values on the grid; and

15 displaying visual and geometric information placed on the grid to a
16 user in graphical form.

1 3. (Once Amended) A method for visualizing data provided in
2 the form of a geometric representation, said method comprising the steps of:

3 extracting a plurality of data values associated with a matrix from
4 the geometric representation;

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5 generating a graphic representation of the plurality of data values;

6 and

7 displaying the graphic representation to a user.

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1 7. (Once Amended) An article of manufacture comprising a
2 computer usable medium having computer readable program code means
3 embodied therein for visualizing data provided in the form of a geometric
4 representation, the computer readable program code means in said article of
5 manufacture comprising computer readable program code means for causing a
6 computer to effect:

7 extracting a plurality of data values associated with a matrix from
8 the geometric representation;

9 generating a graphic representation of the plurality of data values;
10 and

11 displaying the graphic representation to a user.

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1 11. (Once Amended) A computer program product comprising
2 a computer usable medium having computer readable program code means
3 embodied therein for causing visualization of data provided in the form of a
4 geometric representation, the computer readable program code means in said
5 computer program product comprising computer readable program code means
6 for causing a computer to effect:

7 extracting a plurality of data values associated with a matrix from
8 the geometric representation;

9 generating a graphic representation of the plurality of data values;
10 and

11 displaying the graphic representation to a user.

SUBB47

1 15 (Once Amended) A storage device readable by a
2 machine, tangibly embodying a program of instructions executable by the
3 machine to perform a method for visualizing data provided in the form of a
4 geometric representation, said method comprising the steps of:

5 extracting a plurality of data values associated with a matrix
6 from the geometric representation;

7 generating a graphic representation of the plurality of data
8 values; and

9 displaying the graphic representation to a user.